

PROJECT DESCRIPTION
GENERAL

THIS PROJECT INVOLVES THE RECONSTRUCTION OF AN EXISTING TRAFFIC SIGNAL AT THE INTERSECTION OF MD 91 (GAMBER ROAD) AT DEER PARK ROAD IN CARROLL COUNTY DUE TO WIDENING OF THE SOUTHBOUND MD 91 APPROACH. THE EXISTING TWIN MAST-ARM POLE IN THE SOUTHEAST QUADRANT WILL BE MAINTAINED. A NEW TWIN MAST-ARM POLE WILL BE INSTALLED IN THE NORTHWEST QUADRANT.

MD 91 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

INTERSECTION OPERATION

A NEW CONTROLLER HOUSED IN A BASE MOUNTED CABINET SHALL BE INSTALLED AT THIS LOCATION. THE INTERSECTION WILL OPERATE IN A FULLY ACTUATED MODE USING 6 NEMA PHASES. EXCLUSIVE/PERMISSIVE PHASING WILL BE ADDED TO THE MD 91 APPROACHES. THE DEER PARK ROAD APPROACHES WILL CONTINUE TO OPERATE CONCURRENTLY WITH A RIGHT TURN OVERLAP ADDED FOR THE WESTBOUND APPROACH.

SPECIAL NOTES

1. THE FOLLOWING CONTACT PERSONS FOR THIS PROJECT ARE AS FOLLOWS:

PROJECT CONTACTS:

MR. JOHN CONCANNON, ASSISTANT DISTRICT ENGINEER - TRAFFIC
PHONE: (301) 624-8140
MR. JOHN HUCHROWSKI, ASSISTANT DISTRICT ENGINEER - CONSTRUCTION
PHONE: (301) 624-8200
MRS. SUE PALMER, ASSISTANT DISTRICT ENGINEER - MAINTENANCE
PHONE: (301) 624-8105
MS. ANDREA ABEND, UTILITY ENGINEER
PHONE: (301) 624-8115
MR. EUGENE BAILEY, CHIEF OF SIGN SHOP OPERATIONS
PHONE: (410) 787-7670
MR. RICHARD L. DAFF, SR. CHIEF TRAFFIC OPERATIONS DIVISION
PHONE: (410) 787-7630
MR. ROBERT SNYDER, ASSISTANT DIVISION CHIEF OF TOD
PHONE: (410) 787-7631
MS. LYNN GROSSMAN, BGE
PHONE: (410) 470-7939

EQUIPMENT LIST

A. EQUIPMENT TO BE SUPPLIED BY THE ADMINISTRATION.

CATEGORY CODE NO.	DESCRIPTION	UNITS	QUANTITY
900000	VIDEO DETECTION INTERFACE EQUIPMENT = 1-4 CAMERAS	EA	1
900000	4-CHANNEL, RACK MOUNTED AMPLIFIER	EA	1
971017	EIGHT PHASE (FULLY ACTUATED) CONTROLLER AND CABINET-BASE MOUNT	EA	1
973023	FLAT SHEET ALUMINUM SIGNS CONSISTING OF: D-3(1) (VAR. X 16") MAST ARM MOUNT "DEER PARK ROAD" D-3(1) (VAR. X 16") MAST ARM MOUNT "GAMBER ROAD"	SF EA EA	32 2 2

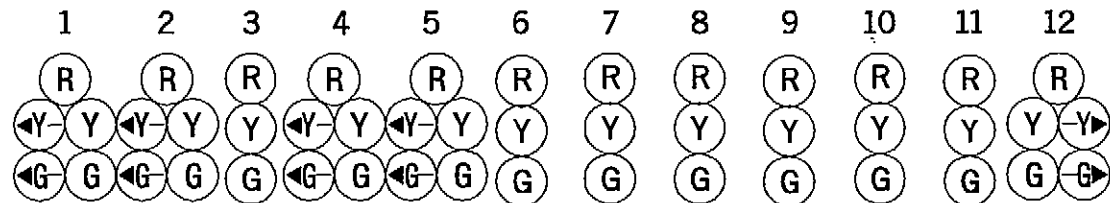
B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR.

CATEGORY CODE NO.	DESCRIPTION	UNITS	QUANTITY
203030	TEST PIT EXCAVATION	CY	1.5
585625	24 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES	LF	110
800000	REMOVE AND DISPOSE OF EXISTING EQUIPMENT	LS	1
801004	CONCRETE FOR SIGNAL FOUNDATIONS	CY	5
801607	INSTALL SHEET ALUMINUM SIGN	SF	32
802501	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE	LF	225
805115	3 INCH SCHED. 80 PVC CONDUIT-BORED	LF	175
805118	4 INCH SCHED. 80 PVC CONDUIT-BORED	LF	120
805125	2 INCH SCHED. 80 PVC CONDUIT-TRENCHED	LF	120
805135	3 INCH SCHED. 80 PVC CONDUIT-TRENCHED	LF	840
805140	4 INCH SCHED. 80 PVC CONDUIT-TRENCHED	LF	120
807202	METERED SERVICE PEDESTAL	EA	1
810022	ELECTRICAL CABLE 1-CONDUCTOR, NO. 8 AWG-THHN/THWN	LF	10
810550	MICROLOOP PROBE, 500 FOOT LEAD IN CABLE	EA	1
810555	MICROLOOP PROBE, 1000 FOOT LEAD IN CABLE	EA	1
811001	FURNISH AND INSTALL ELECTRICAL HANDHOLE	EA	9
800000	VIDEO DETECTION CAMERA	EA	4
837001	GROUND ROD - 3/4 INCH DIA. X 10 FOOT LENGTH	EA	5
860284	12 INCH LED VEHICULAR TRAFFIC SIGNAL HEAD SECTION	EA	34
861107	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)	LF	60
861108	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)	LF	1600
861116	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 AWG) TRAY CABLE	LF	270
871202	INSTALL CONTROLLER AND CABINET - BASE MOUNT	EA	1
800000	15 FOOT T STEEL POLE WITH TWIN 50 FOOT AND 70 FOOT MAST ARMS	EA	1

C. SHA FORCES SHALL REMOVE THE CONTROLLER AND ALL AUXILLIARY EQUIPMENT FROM THE CONTROLLER CABINET. THE CABINET AND ALL OTHER MATERIALS TO BE REMOVED BY THE CONTRACTOR SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

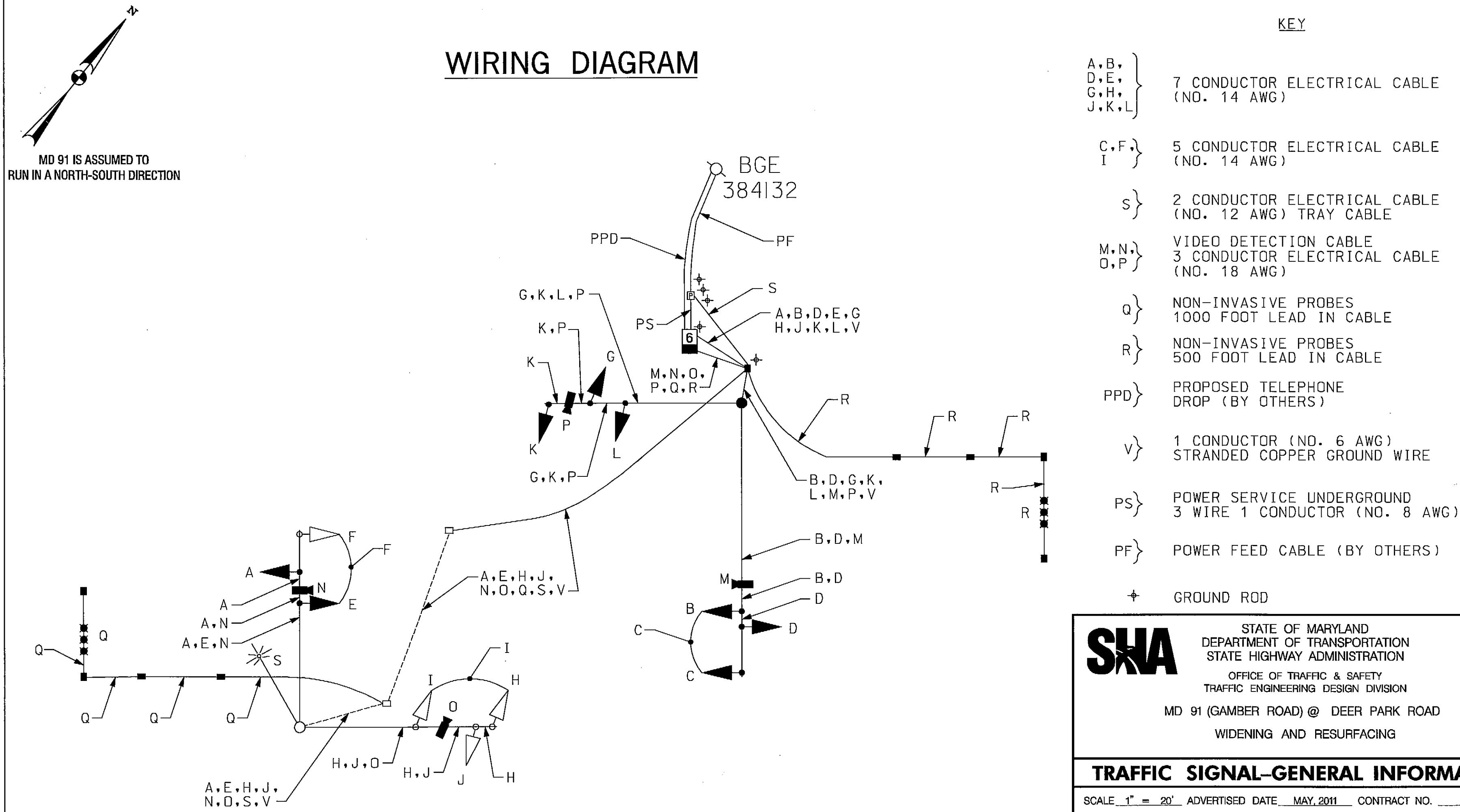
CATEGORY CODE NO.	DESCRIPTION	UNITS	QUANTITY
	NONE		

PHASE CHART



PHASE 1 AND 5	←G←	←G←	R	←G←	←G←	R	R	R	R	R	R	←G→
1 AND 5 CHANGE TO 1 AND 6, 2 AND 5, OR 2 AND 6												
PHASE 1 AND 6	←G←	←G←	G	R	R	R	R	R	R	R	R	R
PHASE 1 CHANGE	←Y←	←Y←	G	R	R	R	R	R	R	R	R	R
PHASE 2 AND 5	R	R	R	←G←	←G←	G	R	R	R	R	R	←G→
PHASE 2 CHANGE	R	R	R	←Y←	←Y←	G	R	R	R	R	R	←Y→
PHASE 2 AND 6	G	G	G	G	G	G	R	R	R	R	R	R
2 AND 6 CHANGE	Y	Y	Y	Y	Y	Y	R	R	R	R	R	R
PHASE 4 AND 8	R	R	R	R	R	R	G	G	G	G	G	G
4 AND 8 CHANGE	R	R	R	R	R	R	Y	Y	Y	Y	Y	Y
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R

WIRING DIAGRAM



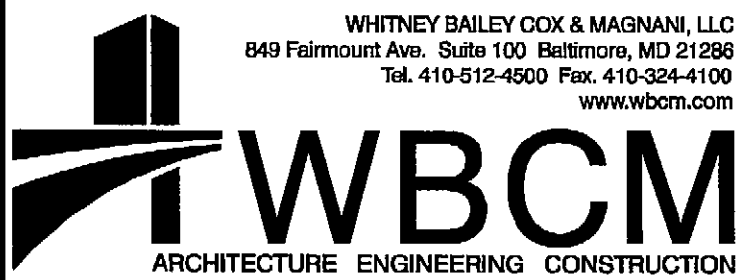
SHA STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
MD 91 (GAMBER ROAD) @ DEER PARK ROAD
WIDENING AND RESURFACING

TRAFFIC SIGNAL-GENERAL INFORMATION

SCALE 1" = 20' ADVERTISED DATE MAY 2011 CONTRACT NO. CL3555176

DESIGNED BY JEH COUNTY CARROLL
DRAWN BY JEH LOGMILE 06009101.46
CHECKED BY DSU TMS NO. K194
F.A.P. NO. SEE TITLE SHEET TOD NO.

TS NO. 2614 C DRAWING SG-02 OF 02 SHEET NO. 21 OF 27



BY: jholloway -